

APPLICANT(S): VIRTUAL PORTS LTD.

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Amendments to the Claims

Claims 1-28 (Cancelled)

29. (currently amended) ~~An A -surgery-assisting~~ anchoring device for use in minimally invasive surgery surgeries within a cavity of the human body, comprising ~~connected at least one first and second attaching~~ anchoring means and at least one second anchoring means, wherein ~~said said first first attaching~~ anchoring means is adapted for attaching the said surgical instrument holding device to an internal surface within a said cavity of the human body and said ~~second second attaching~~ anchoring means is adapted for attaching to at least one surgical instruments or devices to said surgical instrument holding device within said cavity; further wherein said surgery-assisting anchoring device is configured for being introduced entirely into said cavity.
30. (currently amended) The surgery-assisting anchoring device according to claim 29, wherein ~~the said first attaching anchoring~~ means comprises minimally invasive means for attaching to the internal surface of a cavity or to various organs within ~~a said~~ cavity, said first anchoring means are selected from a group consisting of vacuum means, ~~such as vacuum cups;~~ magnetic means, ~~such as magnets or electromagnets~~ situated on either interior, exterior or both surfaces of ~~the said~~ cavity; mechanical means, ~~such as barbs, fixation wires or self retaining clamps;~~ adhesive means, ~~such as pressure adhesive gel or any combination thereof.~~
31. (currently amended) The surgery-assisting anchoring device according to claim 29, further ~~including comprising~~ means allowing ~~it said holding device~~ to be moved from one position to another and to be reattached to the undersurface of ~~the said~~ cavity, or to various tissues within ~~a said~~

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cavity, without creating any additional significant openings in the cavity wall.

32. (currently amended) The surgery-assisting anchoring device according to claim 29, further including means for attaching a plurality of said anchoring ~~devices~~means, selected from vacuum cups, magnetic means, mechanical means, adhesive means or any combination thereof, ~~together~~ wherein said plurality of said anchoring means allows for holding a larger weight or for distributing the mechanical load therebetween said plurality of said anchoring means.

33. (currently amended) The surgery-assisting anchoring device according to claim 29, wherein;

- a. ~~the said second attaching anchoring~~ means comprises mechanical means, ~~such as a selected from a group consisting of~~ vacuum cup, a hook and loop attachment, a connecting string or a rod; adhesive means, magnetic means or any combination thereof; and,
- b. ~~the said surgical instrument devices~~ attached to ~~the said second attaching anchoring~~ means is selected from a group consisting of grasping means; cutting means; suturing means; blood sealing units; illumination means; retracting means; drilling means, resecting means, dissecting means, coagulating means, fixating means, ablative means, imaging means, ~~such as a camera;~~ ~~or means,~~ or a minimally invasive forcing means by which force is exerted upon the cavity walls or upon various organs within ~~the~~ said cavity; ~~for example a said forcing means are selected from a group consisting of~~ pulling means, ~~such as wires for adapted to~~ attaching to another internal surface of ~~the said~~ cavity or to various organs within ~~the said~~ cavity; a pushing means, ~~such as~~

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~~red~~sadapted to ~~for~~ attaching to another internal surface of ~~the~~ said cavity or to various organs within ~~the~~ said cavity; or any combination thereof.

34. (currently amended) The surgery-assisting anchoring device according to claim 29, additionally comprising a vacuum ~~cup~~ means adapted for anchoring at least one surgical instruments ~~surgery devices during surgery;~~ said vacuum means comprising (a) vacuum cup attached to said least one surgical instrument during surgery; (b) vacuum generating means for creating a vacuum inside ~~the~~ said cup; and, (c) vacuum releasing means for realising said vacuum from said cup , ~~and attaching means for attaching to surgical instruments or devices.~~

35. (cancelled)

36. (currently amended) The surgery-assisting anchoring device according to claim 34, additionally comprising an electronically-controlled vacuum pump comprising;

- a. at least one vacuum generating means;
- b. ~~optionally~~ a vacuum controller for controlling the level of vacuum required;
- c. at least one timer ~~means~~ for activating ~~the~~ a vacuum pump for a predefined time interval when receiving a trigger input; and,
- d. at least one indicator means, ~~such as~~ selected from a group consisting of a light and/or buzzer, for indicating that ~~the~~ said vacuum is about to end.

37. (currently amended) An anchoring system for surgery within a cavity of the human body, comprising;

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- a. at least one surgery-assisting anchoring device for use in minimally invasive surgeries within a cavity of the human body, comprising at least one first anchoring means and at least one second anchoring means, wherein said first anchoring means is adapted for attaching said surgical instrument holding device to an internal surface within said cavity and said second anchoring means is adapted for attaching at least one surgical instrument to said surgical instrument holding device within said cavity; further wherein said surgery-assisting anchoring device is configured for being introduced entirely into said cavity~~according to claim 1;~~
- b. at least one surgical instrument or device releasably attached to ~~the~~ said second anchoring means of said surgical instrument holding anchoring device;
- c. ~~a~~-controlling means releasably attached to said surgical instrument holding anchoring device or said surgical instrument such that said controlling means is~~may be used to install said surgical instrument holding anchoring means or said surgical instrument into within a said cavity of the human body, to remove said surgical instrument holding or said surgical instrument them therefrom from said cavity, and optionally to relocate the anchoring means~~said surgical instrument holding device within the said cavity,; ~~at least one portion of said controlling means is~~bein at least partially operated by the operator from outside ~~the~~ said body.

38-40. (cancelled)

41. (Withdrawn) A method of performing surgery within a cavity of the human body by;

- a. obtaining an anchoring device for use in surgery within said cavity, said anchoring device comprising connected first and

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second attaching means, said first attaching means for attaching the device to an internal surface within a cavity of the human body and said second attaching means for attaching to surgical instruments or devices within said cavity;

- b. introducing, into said cavity said anchoring device;
- c. attaching said first attaching means to an internal surface within said cavity; and
- d. attaching surgical instruments to said second attaching means, such that the surgical apparatus is contained within the cavity of the human body.

42. (Withdrawn) The method of performing surgery within a cavity of the human body, according to claim 38, comprising;

- a. providing at least one anchoring device comprising connected first and second attaching means;
- b. providing at least one controlling means;
- c. creating an access incision from the outside of the human body to provide access to an inaccessible cavity or using a natural opening to provide access to an accessible cavity;
- d. using the controlling means to introduce at least one said anchoring device through the access opening into the cavity;
- e. attaching said anchoring device to an internal wall of said cavity or to some other internal organ using its first attaching means;
- f. using the controlling means to introduce at least one surgical instrument, for example a grasping instrument to be attached to an internal organ, through the access opening into the cavity;
- g. attaching said surgical instrument to said anchoring device using its second attaching means; and

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- h. removing the controlling means from the cavity and leaving the access opening free for other use during the surgery;
- i. controlling the surgical equipment installed within the cavity to perform the surgery; and
- j. using a controlling means to remove said surgical instruments from the cavity;

thereby installing surgical apparatus into and removing it from the cavity whilst leaving the access incision unimpeded during surgery.

43. (Withdrawn) The method of performing surgery within a cavity of the human body, according to claim 38, additionally comprising;

- a. attaching at least one forcing means to the abdominal wall by some attachment means such as vacuum cups, magnetic means, mechanical means, adhesive means, fixation wires or any combination thereof; and
- b. forcing the abdominal wall upwards,

thus constructing a contained frame within the cavity used for lifting the abdominal wall during surgery.